

CLAIMS

1. Procedure for the production of a bar notch (3) in the side of a side member (1) and of a cross member notch (4) on the end of a cross member (2) at the joint between a side member (1) and a cross member (2) in workpieces of wood, plastics or MDF - medium density fibreboard - where the cross member notch preferably has a plane bottom (5), which is parallel with a side surface (1') in the side member and two equally long, oblique sides (6), which have oppositely directed equal inclinations in relation to the bottom (5), and where the cross member notch has a plane end (7) in a cross member (2) and two inclined sides (8), which are of a shape and size such as to make the shaped cross member end (4) fit into the notch (3),
characterised by the fact that the side member notch (3) and the cross member shaped end (4) are produced by a punching or shearing operation, and that at least the side member notch is preferably produced in a first step - a preliminary shear - and a second step - a final shear or a finishing shearing.
2. Machine for implementation of the procedure according to claim 1, which comprises in top-view a triangular knife head (9) for two side knives (10) and a nose knife (11), which is displaceable in the vertical direction in a guide (12), which can be moved in the horizontal direction towards or away from a workpiece, which is to be processed, and rests against a rest (13) on a table (14),
characterised by the fact that the machine is embodied with a first set of adjustable guide members (17), which can adjust the position of the knife head (9) in relation to the workpiece (1) or (2), which is to be processed, exclusively during the shearing operation, with a second set of adjustable guide members (23) for setting of the distance between the bar notches (3), and with a third guide members (29), which can function as an end stop for a cross member in the process of shearing a cross bar notch (4), and that the table (14) is embodied with an indentation (33) which permits the bottom cutting edge of the two side knives (10) and the nose knife (11) in their bottom position to be level with or slightly lower in relation to the top side of the table (14), and that the indentation (33) is fitted with a dolly (34) of a soft material, for example a synthetic material.

3. Machine according to claim 2.

characterised by the fact that

the first set of adjustable guide members consists of two stops (17) which each is displaceably positioned on a guide rail (18) mounted on the knife head (9)

- 5 each along its own side knife (10) and which can be fixed to a guide rail (18) in a desired position by means of screws (19) which stops (17) have an internal edge (20), which rests against the outer side of a side knife (10) and a plane front side (21), which can come to rest against the workpiece (1) or (2) which is to be processed, and which is parallel with the rest (13).

10 4. Machine according to claim 2

characterised by the fact that

the rest (13) is embodied as a guide rail with a longitudinal guide list (22) at the rear end, and that the second set of adjustable guide members consists of a number of stops (23), which can be displaced in the longitudinal direction of

- 15 the rest (13) and can be fixed to it in a desired position by means of a bench screw (24) with a handle, and that the stop (23) is embodied with a swingable arm (28), which from an active position - in which a stop (28') at the end of the arm can come to rest against the end of the workpiece (1) to be processed - can be swung to a passive position.

20 5. Machine according to claim 4

characterised by the fact that

the stop (23) at the rear end at the guide list (22) has a lower part (25) with a U-shaped opening (26) to accommodate the bottom edge of the guide list (22), and an upper part (27) embodied as a fork, which in its mounted position

- 25 reaches in over the rest (13) and acts as a guide for the arm (28) in the latter's active position, and that the arm (28) is swingably hinged to the upper part (27) at a stud (28").

6. Machine according to claim 2

characterised by the fact that

- 30 the rest (13) consists of two parts, a right-hand part (13') and a left-hand part (13"), which off the centre of the knife head (9) are placed at a mutual distance (a), and that the third guide members consists of a catch (29), which can be made of square-bar steel and which can be displaced crosswise to the rest (13) in a guide (30) which is mounted on the table (14) in the space (a) from a

forward processing position in which the catch (29) projects a distance forward of the front edge (31) of the rest (13), and where it serves as a rest for the end of a bar (2) during the punching of a cross member notch (4), to a retracted passive position, and that the catch (29) can be fixed to the table (14) by
5 means of a clamping arrangement (32).

7. Machine according to claim 2

characterised by the fact that

the dolly (34) is detachably mounted on a plate (35).

8. Machine according to claim 2

10 characterised by the fact that

the nose knife (11) is of the same width as the bottom (5) in a side member notch (3).